CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

March 26, 2002

Ms. Alicia Torre
Calpine Corporation
4160 Dublin Boulevard
Dublin, CA 94568

Dear Ms. Torre:

RE: EAST ALTAMONT ENERGY CENTER SEVENTH SET OF DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

These data requests (#161-163) are being made in the area of noise. Written responses to the enclosed data requests are due to the Energy Commission staff on or before April 25, 2002, or at such later date as may be mutually agreed upon.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 10 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 657-4394.

Sincerely,

Cheri L. Davis
Energy Facility Siting Project Manager

Enclosure
cc: Docket (01-AFC-4)
Proof of Service List

Technical Area: Noise
Author: Jim Buntin

BACKGROUND

The applicant has stated that it may be possible to achieve an operational plant noise level of about 43 dBA at the nearest sensitive receptor. Given typical summertime ambient nighttime noise levels in the range of 34 dBA L_{90}, achieving a plant noise level of 43 dBA would result in an increase of 9 dBA over ambient noise levels during the quietest period of the night. The Energy Commission staff has concluded that, in the context of CEQA, the potential for a significant noise impacts exists where the noise of the project plus the background noise exceeds the background noise level (L_{90}) by 5 dBA at the nearest sensitive receptor.

Staff is therefore concerned that the predicted increase in ambient noise levels due to the plant operation may constitute a significant noise impact. It is therefore necessary to explore all feasible methods of noise abatement in the project design. The applicant has stated that the project design will include the following noise abatement measures:

- Enclosing combustion turbines to meet 85 dBA at 3 feet
- Enclosure for steam turbine generator
- Silencers on relief valve stacks
- Design major components to limit noise to 90 dBA or 85 dBA at 3 feet
- Locate power block in central portion of site
- Locate cooling towers on north side of site
- Locate brine concentrator compressor inside waste water treatment facility

It is not apparent whether the above measures represent the best available noise control technology, or whether it is feasible to further reduce noise levels so that the plant operational noise levels will not result in a significant noise impact. The contributions of the individual sources to the overall noise levels have not been described, so it is not possible to determine what noise sources are dominant, and where noise reduction may be most effectively applied. For example, it is not clear whether the use of super-low-noise fan technology (which would significantly reduce cooling tower noise levels) would be effective in reducing overall noise levels at the nearest sensitive receptors.

A detailed analysis of the contributions of the individual sources to the overall noise levels, and of the noise control measures which are feasible for each, will allow determination of the feasibility of additional noise abatement.

DATA REQUEST

161. Please provide a detailed acoustical analysis to address achieving the lowest feasible noise level at the nearest noise sensitive receiver, using the best available noise control technology for each source. List the predicted noise contributions of the most significant sources, as well as the overall noise level. Include an analysis of the

following noise control options, to the extent that they affect the overall noise levels at the nearest sensitive receptors:

a. Specify that all major components limit noise to 85 dBA at 3 feet.

b. Use low-noise or super-low-noise fan systems for the cooling towers.

c. Enclose gas compressors.

162. Please provide a listing of the additional required noise control measures included in the above analysis, and the noise reduction expected for each.

163. Please provide an itemized cost estimate for the additional noise mitigation measures required as compared to the cost of those currently proposed to achieve the LORS standard of 45 dBA.